

REMARKS

The Office Action dated April 1, 2005 has been received and carefully considered. The above amendments and the following remarks are being submitted as a full and complete response to the Office Action.

Initially, the applicant gratefully acknowledges the indication that original claims 4, 6 and 12 recite allowable subject matter. New independent claim 16 combines the full features of original claims 1 and 4, whereas new claims 17 to 29 have been added depending from the new independent claim. In light of the Examiner's indication of allowable subject matter, it is respectfully submitted that claims 16 to 29 are in immediate condition for allowance without further elaboration.

Claims 1-3, 5, 7 to 11 and 13 to 15 were rejected under 35 U.S.C. § 102(b) as anticipated by, or in the alternative under 35 U.S.C. § 103(a) as being obvious over Takahashi (U.S. Patent No. 6,378,856) or Blatt (U.S. Patent No. 5,575,462), further in view of certain admissions made by the applicant in the present specification.

As the Examiner has observed, both Takahashi and Blatt may include cover members, which cover a release means for unclamping the arm of a toggle link type clamp apparatus.

First, with respect to Blatt (U.S. Patent No. 5,575,462), the release mechanism is constituted by a "reciprocal member" 80 that protrudes from the top of the actuator body. As noted in Blatt, the reciprocal member 80 may be used to manually reset the rotary clamp by striking the reciprocal member from outside the

housing, thus driving the linkage member away from a clamped position (col. 7, lines 19-24).

Although a cover member for covering the reciprocal member 80 is not explicitly shown or discussed in the cited reference, the present specification states that a cover member may be provided for covering the release means, so that welding spatter does not adhere to the release means during arc welding. The Examiner has construed this statement from the present specification as amounting to admitted prior art.

However, as also noted in the present specification, the cover member used in connection with the acknowledged prior art is entirely removable from the clamp apparatus. That is, such a cover member is removed from the clamp apparatus for activating the release mechanism, and then the cover member must be put back in place. Therefore, as noted in the present specification, separate operations to detach, and then reattach, the cover member are required for releasing the toggle section. Such a process is complicated and time consuming, and detrimentally influences production efficiency. Further, there is always the fear that the cover member may become misplaced or lost.

In contradistinction to the prior art, the cover member of the claimed invention comprises a cover member, which is provided to be openable and closable on a main cylinder body, so that the release means for unclamping the arm is normally covered therewith, and wherein the cover member is pivotably and rotatably attached permanently to the main cylinder body. Therefore, according to the present invention, the release means

can be easily exposed, simply by rotating the pivotally attached cover member upwardly, whereby the release means can be actuated for unclamping the arm of the clamp apparatus. At other times, the cover member covers the release means, preventing welding spatter from coming into contact with the release means. Importantly, at all times, the cover member is permanently attached to the actuator body, while being rotatable and pivotable to expose the release means. Therefore, it is not necessary to remove and reattach the cover member, simplifying operations and avoiding possible loss of the cover member.

As for Takahashi (U.S. Patent No. 6,378,856), this reference discloses a cap or seal mechanism 71, which is made of an elastic material such as synthetic resin or rubber, for covering the releasing projection 67 protruding from an opening 69 of the actuator body 12. The cap 71 closes the opening 69 so that dust or the like cannot invade into the body 12. According to this arrangement, a clamping state can be released simply by manually pressing the elastic cap 71, which flexes and deforms elastically to permit displacement of the releasing projection 67 downwardly. There is no need to remove or "open" the cap 71, to expose the releasing projection 67.

Clearly, the cap 71 does not form a cover member, as claimed, which is open and closable on a main cylinder body, wherein the cover member is pivotably and rotatably attached to the main cylinder body. On the contrary, there is no means whatsoever for "opening" such a cap, and certainly, the cap 71 is neither pivotable nor rotatable, as presently claimed. Therefore,

the structure of Takahashi does not resemble, nor offer the same advantages provided by, the features recited in amended claim 1.

In particular, an elastic cap made of synthetic resin or rubber would not be a suitable cover member for preventing welding spatter from coming into contact and adhering to the release means during arc welding. On the contrary, such a synthetic resin or rubber cap could easily be destroyed or melted by contact with hot welding spatter, so that no protection would be offered to prevent the welding spatter from adhering to the release means itself. Therefore, the structure disclosed in Takahashi is not suitable to achieve the aims of the present invention.

In summary, while fully acknowledging the applicant's admissions made in the present specification, neither of the cited references, Takahashi or Blatt, discloses the claimed feature of "a cover member which is provided openably/closably on a main cylinder body so that a release means for unclamping said arm is covered therewith, wherein said cover member is pivotably and rotatably attached permanently to said main cylinder body." Therefore, together with new claims 16 to 29, amended claims 1 to 15 also are allowable over the prior art of record.


With respect to the dependent claims, the applicant also wishes to separately emphasize the features of the invention recited in pending claims 5, 7 and 8. More specifically, claim 5 sets forth that the cover member includes a locking mechanism for locking the cover member in a closed position on the main cylinder body. Further, claim 7 sets forth that the main

cylinder body has, at one end thereof, a first step and a second step having different heights, wherein the release projection of the release means protrudes from the first step section, while being covered by the cover member. Moreover, claim 8 sets forth, in the context of the features of claim 7, that the cover member is pivotably attached to the second step section. The Examiner has not provided any discussion of these important structural features of the claimed invention, and such features do not appear to be shown or suggested in either of the applied references.

For the foregoing reasons, it is respectfully submitted that the claimed invention is not anticipated and would not have been obvious to a person skilled in the art at the time the present invention was made. Reconsideration and withdrawal of the rejections, with allowance of the pending claims, is respectfully requested.

Should it be deemed that fees, or deficiencies in fees, are required in connection with this or any accompanying communication, such amounts may be charged to the Attorney's Deposit Account No. 07-2519.

Respectfully submitted,

  
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